AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for screening an individual or group of patients for the likelihood of having left ventricular systolic dysfunction (LVSD) comprising, in any order the steps of:

(a) measurement of the levels of a biomarker in a sample or samples of bodily fluid of said patient; and

(b) conducting an electrocardiography (ECG) measurement on said patient or group of individuals;

identification of the presence or absence of one or more major abnormality factors from the ECG trace;

assigning or calculating weighting factors for (a) and (b); and

obtaining a result indicative of the probability of said individual having LVSD.

2. (Currently Amended) [[A]] The method as claimed in of claim 1, comprising the further step performed in any order in relation to the steps of claim 1 of identification of the presence or absence of one or more cofactors which are known to be risk factors for CVD; and assigning or calculating a weighing factor (c) to obtain said result.

3. (Currently Amended) [[A]] The method according to of claim 1 [[or 2]], wherein the weighting factors for (a), (b) and/or (c) are derived by logistic regression analysis on measurements of a biomarker, ECG findings, and of one or more cofactors which are known to be risk factors for CVD; wherein the patient population is taken from the general population and individuals have no previous diagnosis of LVSD.

4. (Currently Amended) [[A]] The method according to any of claims of claim 1 [[to 3]], wherein the biomarker is a natriuretic peptide.

5. (Currently Amended) [[A]] The method according to of claim 2, or any claim dependent thereon, wherein one or more cofactors are selected from myocardial infarction (MI) and angina.

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6. (Currently Amended) An algorithm for the determination of the likelihood of an individual of having <u>left ventricular systolic dysfunction (LVSD)</u> according to the following formula:

$$\text{Log}_e \; p/(1\text{-}p) = \text{Constant} + B_1*(y) + B_2*(\text{ECG abnormality, a}) +$$

$$B_3*(\text{history of MI or angina, a})$$

where p is the probability of having heart failure as defined by LVSD;

B_1, B_2, and B_3 are the coefficients for the logistic model for predicting LVSD;

~~Wherein~~ <u>wherein</u> 'a' is a factor to indicate the presence or absence of ECG abnormality and history of <u>myocardial infarction (MI)</u> or angina and wherein 'a' refers to any two numbers sufficiently separated as to impart a different weighting on the coefficients B_2 and B_3 in the presence or absence of ECG abnormality and history of MI or angina[[.]]<u>;</u>

'y' is either $\log_{10}$ natriuretic peptide expressed in pM, or peptide centile;

wherein peptide centile, expressed as per cent, is determined by ranking all biomarker levels determined by measuring the biomarker level for an apparently healthy population using a chosen assay kit and expressing them as percentiles.

7. (Currently Amended) An algorithm for the determination of the likelihood of an individual of having <u>left ventricular systolic dysfunction (LVSD)</u> according to the following formula:

$$\text{Log}_e \; p/(1\text{-}p) = \text{Constant} + B_1*(y) + B_2*(\text{ECG abnormality, a})$$

where p is the probability of having heart failure due to LVSD

B_1 and B_2 are the coefficients for the logistic model for predicting LVSD;

~~Wherein~~ <u>wherein</u> 'a' is a factor to indicate the presence or absence of ECG abnormality and wherein 'a' refers to any two numbers sufficiently separated as to impart a different weighting on the coefficient B_2 in the presence or absence of ECG abnormality[[.]]<u>;</u>

'y' is either $\log_{10}$ natriuretic peptide expressed in pM, or peptide centile;

wherein peptide centile, expressed as per cent, is determined by ranking all biomarker levels determined by measuring the biomarker level for an apparently healthy population using a chosen assay kit and expressing them as percentiles.

8. (Currently Amended) [[A]] The method as claimed in any of claims claim 1 [[to 5]], in which the identification of the presence or absence of one or more major abnormality factors from the ECG trace is determined from the QRS, QT, and/or JT interval.

9. (Currently Amended) [[A]] The method as claimed in of claim 8, in which the identification of the major abnormality factor is determined from the ratio QRS interval/QT interval or QRS interval/JT interval.

10. (Currently Amended) A method of deriving an indicator of heart failure in a patient comprising:

measuring as a first factor the level of a cardiac bio-marker in a sample of bodily fluid of said patient;

obtaining a patient electrocardiography (ECG) trace;

identifying as a second factor the presence of absence of one or more abnormality factors from the ECG trace; and

deriving an indicator of heart failure as a function of the first and second factors.

11. (Currently Amended) [[A]] The method as claimed in of claim 10, wherein the cardiac bio-marker is a marker indicative of the presence or absence of heart failure.

12. (Currently Amended) [[A]] The method as claimed in of claim 11, in which the marker is a natriuretic peptide.

13. (Currently Amended) [[A]] The method as claimed in of claim 12, in which the natriuretic peptide is BNP.

14. (Currently Amended) [[A]] The method as claimed in any of claims claim 10 [[to 13]], for deriving an indicator of LVSD.

15. (Currently Amended) A method of deriving an indicator of heart failure in a patient comprising:

obtaining a patient electrocardiography (ECG);

measuring at least one of the QRS, QT and JT interval from the ECG and deriving the indicator of heart failure from the the QRS, JT and/or QT interval.

16. (Currently Amended) [[A]] The method as claimed in of claim 15, in which the indicator is derived as a function of the ratio QRS interval/QT interval or QRS interval/JT interval.

17. (Currently Amended) [[A]] The method as claimed in claims of claim 15 [[or 16]], further comprising measuring the level of a bio-marker in a sample of bodily fluid of a patient and deriving the indicator as a function in addition of the measured level.

18. (Original) An apparatus for measuring an indicator of heart failure in a patient comprising at least one of a QRS interval detector, a QT interval detector and a JT interval detector.

19. (Currently Amended) A heart failure indicator apparatus comprising a data processor arranged to receive data representative of the measurement of a level of a bio-marker in a sample of bodily fluid of a patient and data representing an electrocardiography (ECG) measurement on the patient and/or data representing a measurement of at least one of a QRS or a QT or a JT interval in an ECG, the processor being further arranged to process the received data to derive an indicator of heart failure.

20. (Currently Amended) A kit of parts comprising at least one of a detector for detecting as a factor levels of a bio-marker in a sample of bodily fluid of a patient, a detector for obtaining an electrocardiography (ECG) trace from on a patient, a processor for identifying as a factor the presence or absence of one or more major abnormality factors from the ECG

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trace; a processor for measuring as a factor at least one of the QRS, QT and JT interval from an ECG trace and a processor for processing measurements to derive an indicator of heart failure as a function of one or more of the factors.

21. (Currently Amended) A computer program comprising a set of instructions configured to implement a method as claimed in ~~any of claims~~ claim 1 ~~to 5 or 8 to 17~~.

22. (Original) A computer configured to implement a computer program as claimed in claim 21.

23. (Original) A computer readable medium storing a computer program as claimed in claim 21.